

LEE, COLIN

Subject: FW: Follow up on Hickam Pesticide concerns
Attachments: TO182 Drip Line 1708 Harmon SoFR 032315 excerpt.pdf; ToxFree Homes Ranked by Sum of Heptachlor and Chlordane Isomer Levels.jpg

From: Grange, Gabrielle Fenix <fenix.grange@doh.hawaii.gov>

Sent: Friday, April 17, 2015 6:28 PM

To: LaDean Gordon <ladeanstandardgrooming@hotmail.com>

Cc: Sadoyama, Eric J <eric.sadoyama@doh.hawaii.gov>; Brooks, Barbara A <barbara.brooks@doh.hawaii.gov>; Herrera, Angeles <Herrera.Angeles@epa.gov>; Wilson, Patrick <Wilson.Patrick@epa.gov>; Matsuda, Thomas K <Thomas.K.Matsuda@hawaii.gov>; roger.brewer@doh.hawaii.gov

Subject: Follow up on Hickam Pesticide concerns

Aloha LaDean,

Thank you for the conversation yesterday afternoon. As I said, I wanted to reach back out to you to tell you that we have been carefully reviewing the new data for your home on Hickam, including the two rounds of air sampling your conducted through ToxFree, and the soil data collected by TetraTech around the foundations of your home. I am still awaiting the TetraTech air sampling results associated with the pictures you took of the air samplers in your home.

I understand that you feel your concerns are not being addressed, and that HDOH, EPA, the Air Force and Hickam Communities are not doing enough to protect you. Because I know you are seeking answers and other experts to help you understand what your exposures might be, I thought it might be useful to summarize the information and data we have to date about historic pesticides at your home.

1. Your neighborhood was not affected by the new housing construction soil mishandling that resulted in the Department of Health taking action to require investigation and remediation elsewhere on Hickam Air Force Base (now Joint Base Pearl Harbor Hickam).
2. Your neighborhood was built in the 1970's, and homes at that time, on and off base, were routinely treated with organochlorine pesticides for termite control. According to Hickam records, your home and neighborhood has not had grading or reconstruction activities that would have exposed or moved termiticides placed under the foundation.
3. Air sampling you conducted using the ToxFree test kits, showed results of 9 and 15.7 ng/m³ in November, 2014, and 11 and 12 ng/m³ in February, 2015. These concentrations are slightly above the EPA screening value of 10 ng/m³, which equals a cancer risk of 1 in 1 million. Your results are below the ATSDR Minimal Risk Value of 20 ng/m³ for non-cancer effects.

To put these numbers in perspective, I am providing a quote from the ATSDR Public Health Statement for Chlordane (<http://www.atsdr.cdc.gov/PHS/PHS.asp?id=353&tid=62>) Here is an excerpt from the EPA Air Toxics Hazard Summary for Chlordane refers to this study and has other helpful information. <http://www.epa.gov/ttnatw01/hlthef/chlordan.html#ref1>

Over 50 million persons have lived in chlordane treated homes. Indoor air in the living spaces of treated homes have been found to contain average levels of between 0.00003 and 0.002 milligram (mg) of chlordane in a cubic meter of air (mg/m³). However, levels as high as 0.06 mg/m³ have been measured in the living areas of these homes. Even higher levels are found in basements and crawl spaces.

To compare your results to ATSDR values listed, we need to convert the quoted concentrations from mg/m³ to ng/m³. There are 1,000,000 nanograms in a milligram. So, for example, 0.00003 mg/m³ = 30 ng/m³

So the average levels of chlordane in air in the ATSDR citation above found were between 30 ng/m³ and 200 ng/m³. Levels as high as 60,000 ng/m³ have been measured in the living areas of these homes. The highest level found by the ToxFree sampling at your home was 15.7 ng/m³.

I also visited the ToxFree website, and noticed that they have a summary chart ranking homes by heptachlor and chlordane isomer levels in the homes sampled using their test kits. The figure is attached. Note that the highest concentration measured in your home was 15.7 ng/m³, which appears to be the lowest measured concentration in a residential home of all those reported on the graph.

While I am eager to get the results of the formal, quality controlled air quality testing to ensure we haven't missed anything, the comparison of your results to the EPA and other study values strongly suggests to me that the concentrations you found in your home are not indicative of high chlordane exposure.

4. At DOH request, and as shown in the photos you sent, HC conducted air sampling in your home. These results are pending and we will evaluate them when we receive them to assess whether these results indicate any additional risks and whether they confirm the findings of the test kits.
5. Because the primary exposure pathway of concern for aged organochlorines (placed more than 25 years ago), is inadvertent soil ingestion of exposed surface soils, and because soils immediately adjacent to treated foundations frequently have elevated concentrations of these chemicals, HC agreed to sample these soils per your request. Attached please find the data, along with a figure showing the sampling area adjacent to your home foundation. These data show that the measured soils are well below DOH's unrestricted use Environmental Action Levels, and are not indicative of a hazard.

I hope this information helps, or will be useful to your physicians or medical toxicologists as they work to help identify the causes of your illness.

Along those lines, I am sending a couple of additional links. We are working to set up more rigorous pesticide surveillance at the HEER Office, and Barb has been checking CDC for useful resources. The CDC Pesticide Illness and Injury Surveillance Page at <http://www.cdc.gov/niosh/topics/pesticides/> specifically discusses occupational exposure to pesticides through pet grooming:

The Environmental Protection Agency estimates that 10,000-20,000 physician-diagnosed pesticide poisonings occur each year among the approximately 2 million U.S. agricultural workers. Agricultural workers, groundskeepers, pet groomers, fumigators, and a variety of other occupations are at risk for exposure to pesticides including fungicides, herbicides, insecticides, rodenticides, and sanitizers.

Here are two journal articles on the CDC website on this subject. While you mentioned in our earlier conversations that you do not use or apply pesticide flea treatments as part of your grooming business, the two studies below, together may suggest an inhalation pathway concern from grooming pets who are treated by their owners or others with insecticides.

Hazardous exposures among dog groomers.

Authors

NIOSH

Source

Appl Occup Environ Hyg 1997 Feb; 12(2):91-93

Link

<http://dx.doi.org/10.1080/1047322X.1997.10389464>

NIOSHTIC No.

00235424

Abstract

A study was conducted examining respirable dust exposures in the workplaces of dog groomers. Respirable dust exposures were measured using cassette nylon cyclone samplers worn by dog groomers and other employees in seven dog grooming shops. In addition, work activities were recorded. The mean respirable dust exposure was 0.14mg/m³, ranging from less than 0.01 to 0.31mg/m³. Shops using a special hair control system, the Clipper Vac, had the lowest dust levels; the highest levels were seen in shops with the greatest number of groomers and the least square footage. Other risk factors associated with dog grooming were poor body posture, excessive noise exposure, pesticide exposure, electrical hazards, and poor hygiene. Recommendations to improve workplace conditions in dog grooming facilities included bathing dogs prior to grooming to reduce exposure to respirable dust and infectious organisms, providing an adequate amount of floor space, use of hair control systems, use of low toxicity pesticides, use of proper personal protective equipment, use of rigorous personal hygiene procedures, use of prophylactic treatment for worms, requiring proof of immunization for all dogs and cats being groomed, requiring current tetanus immunizations for all personnel, having written procedures for cleaning of bite wounds, and providing all electrical outlets with ground fault circuit interrupters. Additional recommendations for occupational health professionals were presented.

Illnesses associated with occupational use of flea-control products - California, Texas, and Washington State, 1989-1997.

Authors

Mehler-L.; Shannon-J; Baum-L

Source

MMWR 1999 Jun; 48(21):443-447

Link

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4821a3.htm>

NIOSHTIC No.

20027442

Abstract

Dips, shampoos, and other insecticide-containing flea-control products can produce systemic illnesses or localized symptoms in the persons applying them. Although these products may pose a risk to consumers, they are particularly hazardous to pet groomers and handlers who use them regularly. Illnesses associated with flea-control products were reported to the California Department of Pesticide Regulation, the Texas Department of Health, and the Washington State Department of Health, each of which maintains a surveillance system for identifying, investigating, and preventing pesticide-related illnesses and injuries. This report describes cases of occupational illnesses associated with flea-control products, summarizes surveillance data, and provides recommendations for handling these products safely

Fenix Grange, Supervisor

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Hawaii Department of Health

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From: LaDean Gordon [<mailto:ladeanstandardgrooming@hotmail.com>]

Sent: Tuesday, April 14, 2015 6:34 AM

To: Herrera, Angeles

Cc: Grange, Gabrielle Fenix

Subject: RE: Hickam complaints

Which data would that be? Just wondering....is she looking into the vapor intrusion issues that are happening on Hickam? I am sure that you have gotten the latest test results for our indoor air of the home here in Hickam Communities. I can provide the results of the other homes to you as well if you need. We filed a formal complaint with the 15 Wing Inspector General as well as the Navy Inspector General, yesterday I got these emails from them...

Mrs. Gordon,

Bottom line is Navy has the lead on your husband's complaint. If the Navy

acknowledges that there is a legitimate danger that needs to be briefed to

Airmen, the Air Force will do so. But, in the absence of such we're all part

of the DoD...and we must follow the Navy's lead.

As you've been informed, your husband's complaint was transferred. The Navy

IG is the only IG with an open case as they are lead on Joint Base Pearl

Harbor Hickam. If your husband wants to discuss how the Air Force closed his

case, please have him call me at his convenience and we can discuss.

Deb

Debra Straight

15 WG/IGQ

449-1556

I had included BOTH IG's in the email, this is the response I got from the Navy IG

Ms. Gordon,

Because our office is not the appropriate office to handle cases involving pesticides in housing, I sent this additional information to our Housing Privatization Housing Management Office (HMO) on JBPHH for inclusion in the case, which is now with Hickam Community Housing. Our Safety Office was not able to take the case, as they only deal with occupational safety involving federal employees.

VR, Aaron

AARON N. LEHL

Senior Investigator

Office of the Inspector General, NRH

(808) 471-1951

When I asked if this meant that Hickam Communities was not handling the complaint through their HMO office this is the response I got.

Ms. Gordon,

Yes, they have the case.

VR, Aaron

AARON N. LEHL

Senior Investigator

Office of the Inspector General, NRH

(808) 471-1951

SO, The Inspector Generals have both stepped down and let Hickam Communities take charge of our complaint against them :(Between this and the HDOH saying that some of the housing on Hickam is NOT in their jurisdiction, we hope that the EPA will be able to help on behalf of all the families here on Hickam.

Thank you for your time,

LaDean Gordon
803-316-1550

From: Herrera.Angeles@epa.gov
To: ladeanstandardgrooming@hotmail.com
CC: fenix.grange@doh.hawaii.gov
Subject: Re: Hickam complaints
Date: Tue, 14 Apr 2015 14:26:30 +0000

Good morning Mrs. Gordon. I have been in contact with Fenix regarding your concerns. I understand she is looking into the data you provided and will contact you soon. Thanks. Angeles

From: LaDean Gordon <ladeanstandardgrooming@hotmail.com>
Sent: Monday, April 13, 2015 5:02 PM
To: Herrera, Angeles
Subject: Hickam complaints

Hello, I was informed by Mr Patrick Wilson that you are our point of contact for the Hickam Communities complaints on JBPHH in Hawaii. I wanted to write to see if there is anything or if the EPA is doing anything to help with the Hickam residents situation here? I was told you are in direct contact with Fenix Grange with the HDOH on this matter, they have told me that MY housing area is out of their jurisdiction and there is nothing they can do because there was only moderate remodeling of our housing done and no construction, yet we have had indoor air tested for our home and Heptachlor and Chlordane were both found in the air. How can the EPA help with these complaints as we are NOT the only family that has a positive test from indoor air samples on Hickam.

LaDean Gordon
803-316-1550

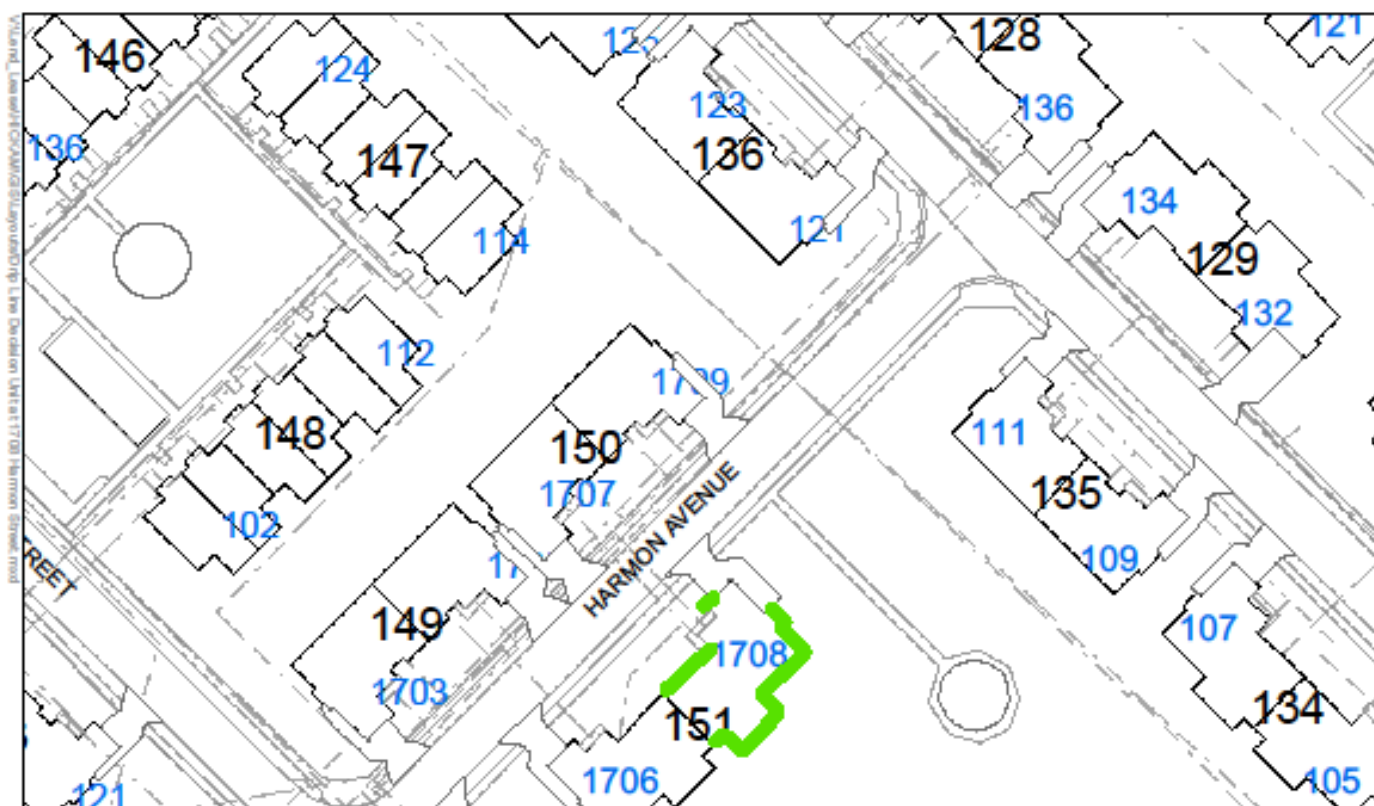


Table 1
Analytical Results for Pesticides In Soil
Drip Line Soil Sampling, 1708 Harmon Avenue
Joint Base Pearl Harbor-Hickam, Oahu, Hawaii

Decision Unit	Sample ID	Sample Date	Depth Interval (inches)	Aldrin (mg/kg)	Chlordane ⁽¹⁾ (mg/kg)	Dieldrin (mg/kg)	4,4-DDE (mg/kg)	4,4-DDT (mg/kg)
Drip Line	HAR-DL-06-01	3/11/2015	0 to 6	0.0049	0.61	0.031	0.0067	0.015
	HAR-DL-06-02	3/11/2015	0 to 6	<0.0044	2.1	0.032	0.060	0.016
	HAR-DL-06-03	3/11/2015	0 to 6	<0.0044	0.94	0.019	0.0054	<0.0081
	HAR-DL-12	3/11/2015	6 to 12	<0.0044	0.58	0.015	<0.0048	<0.0081
HDOH Tier 1 EAL ⁽²⁾				0.92	16	1.5	1.4	1.7
Site-Specific EAL ⁽³⁾				12	23.4	9.8	NE	NE

NOTES

Only detected analytes are shown in this table.
Sample HAR-DL-06 is a triplicate.

Exceeds HDOH Tier 1 EAL

Exceeds Site-Specific EAL

DDE dichlorodiphenyldichloroethylene

DDT dichlorodiphenyltrichloroethane

EAL Environmental Action Level

HDOH Hawai'i Department of Health

mg/kg milligram per kilogram

NE Not established

< less than the laboratory reporting limit

(f) Technical chlordane. The technical chlordane constituents alpha-chlordane, gamma-chlordane, heptachlor, and heptachlor epoxide not reported in this table. Any detections of these chemicals are provided in the laboratory analytical report.

(2) HDOH Tier 1 EALs are for soil with an unrestricted land use at a distance greater than 150 meters from surface water, and groundwater is a non drinking water resource (Table B-1) (HDOH 2011a).

(3) Site-specific EALs calculated for Hickam Communities property (Tetra Tech 2011a and 2011b).

Excerpts from ***TO#182 –Summary of Findings Report for Drip Line Soil Sampling, 1708 Harmon Avenue, Joint Base Pearl Harbor-Hickam, Oahu, Hawaii*** (Tetra Tech 3/23/2015)

Sum of Heptachlor and Chlordane Isomers Concentration in Air Samples From Last 4 Years

